Advisory Committee

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Transportation Industry
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Wyoming's Activities

What is Wyoming doing to promote carbon sequestration?

The state of Wyoming is collaborating with scientists who are working to develop best management practices that will promote and quantify land management practices that will increase carbon sequestration. Research is currently being compiled and conducted to evaluate the effects of cropping practices, soil conservation practices, forest management, and several grazingland management practices on soil and plant carbon levels.

Activities to Date

- Report to the Wyoming Legislature in 2002 describing carbon storage and potential for specific management practices.
- Demonstration projects on rangeland (Lusk) and forestlands (Newcastle) from 2004 to present.
- Conducted an outreach workshop for Wyoming citizens, June 22-23, 2004.
- Participated on the Chicago Climate Exchange (CCX®) technical advisory committee to determine protocols for sale of rangeland carbon credits on the CCX®.
- Completed a soil productivity and vegetative analysis of Wyoming to establish potential carbon storage levels.

For a list of Rangeland Aggregators or more information about the Wyoming Carbon Sequestration Program

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Wyoming Carbon Sequestration Program

Information provided by the Wyoming Carbon Sequestration Advisory Committee

www.wyomingcarbon.org

Background

What is meant by carbon sequestration?

Terrestrial carbon sequestration is essentially the process of transforming carbon in the air (carbon dioxide, or CO_2) into stored soil or plant carbon. Carbon dioxide is taken up by plants through the process of photosynthesis, and incorporated into living plant matter. This is not a static process and change occurs daily as plants grow removing carbon from the atmosphere, then die and incorporate a portion of their biomass into the soil.

The Role of Agriculture

Management practices that increase plant production also increase the amount of carbon that is stored in plants and soil.

Carbon that is stored through improved these land management practices can potentially be marketed by landowners through carbon credit trading programs. Companies, individuals or other entities that release carbon into the atmosphere may purchase these carbon credits through a trading system to offset emissions.
The financial opportunities of selling carbon credits will assist local economies and producers.

The Role of CCX®

The Chicago Climate Exchange (CCX®) quantifies credits and sells greenhouse gas credits derived from conservation practices. The credits are aggregated, or pooled, from farmers or landowners in order to sell them to CCX® members that have made voluntary commitments to reduce their greenhouse gas contributions.

FAQs

What can agricultural producers do to enhance carbon sequestration?

There are several practices that can increase carbon sequestration, including:

a. No-till or reduced-till

b. Increased crop rotation intensity by eliminating summer fallow

c. Buffer strips

d. Conservation measures that reduce soil erosion

e. Using higher residue crops, such as corn, grain sorghum, and wheat

f. Using cover crops

g. Selecting for varieties and hybrids that store more carbon

What can grazing land managers do to enhance carbon sequestration?

Grazingland managers can increase carbon sequestration by:

a. Improving forage quality

b. Regular use of prescribed burning to increase forage productivity

c. Reducing overgrazing

Will agricultural producers get paid for carbon sequestration?

A private system of trading for carbon credits is being established. A market value is paid to producers per acre contracted. Several companies have already begun buying or leasing carbon credits. This is a relatively new and emerging practice. It is also possible that incentives may be developed for producers to sequester carbon. In addition to the potential for payments for sequestering carbon there are significant benefits for agricultural producers to implement practices that increase soil organic matter such as:

a. Improved soil structure and quality

b. Improved soil productivity through increased organic matter

c. Reduced erosion through improved soil structure

d. Improved water quality through reduced erosion

What are the eligibility requirements for contracting rangeland in Wyoming?

Wyoming counties with annual rainfall in the 14 to 40 inch range are eligible for enrollment in the exchange soil offset (XSO) program and include:

Big Horn	Campbell
Converse	Crook
Goshen	Hot Springs
Johnson	Laramie
Lincoln	Niobrara
Park	Platte
Sheridan	Sublette
Teton	Unita
Weston	

Landowners who enroll must commit to maintain soil carbon storage resulting from the establishment or maintenance of eligible rangeland grass.

How do I find out how much would be paid per acre for my rangeland?

Eligible rangeland soil carbon management Offset Issuance rates are based on below-ground carbon sequestration rates established for designated Land Resource Regions. The rate is based upon the Rangeland Soil Carbon Management Offset Issuance rates (in metric tons CO2/acre/year). The price per acre is negotiable based upon the current trading rate for carbon credits on the CCX® . To determine this price, contact a rangeland aggregator for current rates.